



PP-206

Parathyroid Hormone Levels is Increased in Ischemic Cerebrovascular Events and Related with Decreased Aortic Distensibility

Hakan Altay¹, Ali Çoner², Semih Giray⁴, Çağatay Andıç⁵, Volkan Çamkiran⁶, Saif Hamad¹, Haldun Müderrisoğlu³

¹Başkent University Hospital, Department of Cardiology, Adana, ²Hakkari State Hospital, Department of Cardiology, Hakkari, ³Başkent University Hospital, Department of Cardiology, Ankara, ⁴Başkent University Hospital, Department of Neurology, Adana, ⁵Başkent University Hospital, Department of Radiology, Adana, ⁶Çorlu Military Hospital, Department of Cardiology, Tekirdag

Aim: Parathyroid hormone was suggested as closely related with diastolic heart failure and endothelial dysfunction in several trials before. In this study, we aimed to search therelation between parathyroid hormone levels and aortic distensibility in ischemic cerebrovascular event patients.

Methods: Sixty-three ischemic cerebrovascular event patients were enrolled in the study. Age-matched 51 individuals otherwise healthy were included in the control group (57.4±13.5 vs. 56.3±11.6 years) (p<0.001). All patients in the study were in sinus rhythm and they did not have any valvular disease or systolic heart failure. Parathyroid hormone levels (pg/mL) were measured in all patients and 2D echocardiography were made. Independent t-test and Spearman rank correlation test were used for statistical analysis and p values under 0.05 were accepted as significant.

Results: Parathyroid hormone levels in the stroke group were significantly higher than parathyroid hormone levels in the control group (65.4±27.3 vs. 55.5±18.6pg/mL) (p=0.029) (Figure-1). Parathyroid hormone levels were found in a negative correlation with aortic distensibility (r=-0.269, p=0.004).

Discussion: Atherosclerosis is a systemic disease which involves vasculature bed globally. Likewise coronary artery disease atherosclerosis is also the guilty factor in ischemic cerebrovascular events. Endothelial dysfunction and oxidative stress is related with the progression of atherosclerotic plaques. Parathyroid hormone is a novel promising biomarker which is closely associated with endothelial dysfunction and oxidative stress. We found that parathyroid hormone levels are inversely related with aortic distensibility and also we stated that ischemic stroke patients have higher parathyroid hormone levels.

